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GetNURBSDerivat.txt
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功能:求二维NURBS曲线参数为u的点处的r阶导矢(px,py)输入参数:r-导矢阶数;m_nTimes-曲线次数;u-参数。输出参数:(px,py)-r阶导矢。调用函数:GetWBPr-计算分子的r阶导矢与分母的r阶导数。GetNURBSDerivat-递归调用自身。
void GetNURBSDerivat(int r, int m_nTimes, double u, double &px, double &py)
                  double pw, PX, PY, PW; double Xikmax, Xikmay;
                   if(r==0)
                                     GetPoint(u, px, py, pw);
                   else if (r>0)
                                     \begin{array}{ll} \texttt{GetWBPr}\left(r, \texttt{m\_nTimes}, \texttt{u}, \texttt{PX}, \texttt{PY}, \texttt{PW}\right); \\ \texttt{Xikmax=0}; & \texttt{Xikmay=0}; \\ \texttt{for}\left(\texttt{int} \ \texttt{j=1}; \texttt{j} {<=} \texttt{r}; \texttt{j++}\right) \end{array} 
                                                       GetWBPr(j,m_nTimes,u,PX,PY,PW);
                                                      GetNURBSDerivat(r-j, m_nTimes, u, px, py);
Xikmax=Xikmax+Fact(r)/(Fact(r-j)*Fact(j))*PW*px;
Xikmay=Xikmay+Fact(r)/(Fact(r-j)*Fact(j))*PW*py;
                                     GetPoint(u, px, py, pw);
                                     GetWBPr(r, m_nTimes, u, PX, PY, PW);
                                     px=(PX-Xikmax)/pw;
py=(PY-Xikmay)/pw;
}
```